Applicant: Lieping Chen et al. Attorney's Docket No.: 07039-331001

Serial No.: 10/072,622 Filed: February 7, 2002

Page : 3 of 7

## Amendments to the Claims

This listing of claims replaces all prior versions and listings of claims in the application.

## Listing of Claims

1. (Currently Amended) A purified polypeptide consisting of:

(a) a variant of

a wild-type ICOS amino acid sequence consisting of an extracellular domain of wild-type ICOS, the wild-type ICOS extracellular domain being SEQ ID NO:10 or SEQ ID NO:9, the variant:

consisting of an amino acid sequence that differs by one or more amino acid substitutions from, but is at least 85% homologous to, its corresponding wild-type ICOS amino acid sequence; and

having altered affinity for human B7-H2 (SEQ ID NO:43) compared to its corresponding wild-type ICOS amino acid sequence, wherein said affinity for human B7-H2 is increased by at least 10% relative to the affinity of the corresponding wild-type ICOS amino acid sequence for human B7-H2; or

(b) the variant of (a) and: (I) a peptide sequence unrelated to ICOS attached to the N-terminus of the variant of (a); (II) a peptide sequence unrelated to ICOS attached to the C-terminus of the variant of (a); or (III) a peptide sequence unrelated to ICOS attached to the N-terminus of the variant of (a) and a second peptide sequence unrelated to ICOS attached to the C-terminus of the variant of (a).

## 2. (Cancelled)

 (Previously Presented) The purified polypeptide of claim 1, wherein the variant differs from its corresponding wild-type amino acid sequence at a position corresponding to amino acid 76 of SEQ ID NO:12. Applicant: Lieping Chen et al. Attorney's Docket No.: 07039-331001

Serial No.: 10/072,622 Filed: February 7, 2002

Page : 4 of 7

4. (Previously Presented) The purified polypeptide of claim 3, wherein, in the variant, the amino acid at the position corresponding to said amino acid 76 of SEQ ID NO:12 is glutamine.

- (Previously Presented) The purified polypeptide of claim 1, wherein the variant differs from its corresponding wild-type amino acid sequence at a position corresponding to amino acid 52 of SEQ ID NO:12.
- 6. (Previously Presented) The purified polypeptide of claim 5, wherein, in the variant, the amino acid at the position corresponding to said amino acid 52 of SEQ ID NO:12 is serine.
- 7. (Previously Presented) The purified polypeptide of claim 1, wherein said variant is capable of inhibiting T cell activation in a T cell proliferation assay.
- 8-23. (Cancelled)
- 24. (Previously Presented) The purified polypeptide of claim 1, wherein the peptide sequence unrelated to the ICOS or the second peptide sequence unrelated to ICOS is a blocking agent that facilitates survival of the polypeptide *in vivo*.
- 25. (Previously Presented) The purified polypeptide of claim 1, wherein the peptide sequence unrelated to the ICOS or the second peptide sequence unrelated to ICOS is a tag amino acid sequence.
- 26. (Currently Amended) The purified polypeptide of claim 1, wherein the peptide sequence unrelated to the ICOS or the second peptide sequence unrelated to ICOS is an immunoglobulin a human IgG1 CH2-CH3 sequence.
- 27. (Canceled)